

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A dopaminergic neuron proliferative progenitor cell marker polynucleotide probe comprising a sequence selected from the following nucleotide sequences (1) to (5):

- (1) a nucleotide sequence complementary to a nucleotide sequence of SEQ ID NO: 1 ~~or 2~~;
- (2) a nucleotide sequence complementary to a nucleotide sequence encoding an amino acid sequence of SEQ ID NO: 3 ~~or 4~~;
- (3) a nucleotide sequence complementary to a nucleotide sequence encoding a sequence lacking a transmembrane domain in an amino acid sequence of SEQ ID NO: 3 ~~or 4~~;
- (4) a nucleotide sequence that hybridizes under stringent conditions with a polynucleotide consisting of a nucleotide sequence of SEQ ID NO: 1 ~~or 2~~, wherein the stringent conditions are 2x SSC, 0.1% SDS, 65°C; and,
- (5) a nucleotide sequence comprising at least 15 contiguous nucleotides selected from sequences of (1) to (4).

2. (Cancelled)

3. (Withdrawn) A method of selecting a dopaminergic neuron proliferative progenitor cell, wherein the method comprises the step of contacting the polynucleotide of claim 1 with a cell sample thought to comprise a dopaminergic neuron proliferative progenitor cell.

4. (Cancelled)

5. (Withdrawn) A method of selecting a postmitotic dopaminergic neuron progenitor cell comprising the steps of:

- (1) selecting a dopaminergic neuron proliferative progenitor cell using the method of claim 3;
- (2) culturing the proliferative progenitor cell selected in (1); and,
- (3) screening the progenitor cell cultured in (2) using a postmitotic dopaminergic neuron marker.

6. (Withdrawn) A dopaminergic neuron proliferative progenitor cell selected using the method of claims 3.

7. (Withdrawn) A method of isolating a gene specific to a dopaminergic neuron proliferative progenitor cell and a gene specific to each maturation stage of the progenitor cell differentiating into a dopaminergic neuron, wherein the method comprises the step of detecting and isolating a gene specifically expressed in the proliferative progenitor cell of claim 6, or a cell differentiated, induced, or proliferated from the progenitor cell.

8. (Withdrawn) A method of screening using maturation as an index, wherein the method comprises the steps of contacting a test substance with the proliferative progenitor cell of claim 6, and detecting the differentiation or proliferation of the progenitor cell induced by the contact.

9. (Withdrawn) A postmitotic dopaminergic neuron progenitor cell selected using the method of claim 5.

10. (New) A dopaminergic neuron proliferative progenitor cell obtained using a probe comprising a sequence selected from the following nucleotide sequences (1) to (5):

- (1) a nucleotide sequence complementary to a nucleotide sequence of SEQ ID NO: 1;
- (2) a nucleotide sequence complementary to a nucleotide sequence encoding an amino acid sequence of SEQ ID NO: 3;
- (3) a nucleotide sequence complementary to a nucleotide sequence encoding a sequence lacking a transmembrane domain in an amino acid sequence of SEQ ID NO: 3;

- (4) a nucleotide sequence that hybridizes under stringent conditions with a polynucleotide consisting of a nucleotide sequence of SEQ ID NO: 1, wherein the stringent conditions are 2x SSC, 0.1% SDS, 65°C; and,
- (5) a nucleotide sequence comprising at least 15 contiguous nucleotides selected from sequences of (1) to (4).